

Learning about - based on principles of
loyalty, effort - personally
method - based on the concept denotes
addressed to these principles

Officers - Example

Chief and - efficiently

Have you & get acquainted with your
duties of jobs. Order to being the
order of it & willing to sacrifice for it,
Broken of

A.S.O. from each unit Off. & work & the
other Officer

Loyal to O & organization & keep
loyalty to authority, given in giving
order & reporting

Proper dress - uniform & clean

Order - firmness & efficiency & respect

Uniform - sign of team spirit

Corps grouped to form Armies, - overseas.

Battalion - Known as unit - largest
from unit in army - grouped to form
brigades. 3 Batt to Brig. Very imp
part largest. self sufficient. Act indep
under Divisional Hdqrs. Affs - Lt. Col
Staff to assist him. - Administrative
Staff & Special Consult & takes
Signal Off + 4 Co. Comm. advice. 2 J.C. 5th
in Com - Adj + Int. Off + Med. Off.

5 Co. - Major - field/O.

Smallest self. attained. 1 Hdqrs Co. - 6 Platoon.

1. Signals
2. Anti Aircraft
3. Anti (3" H.)
4. Carrier - Bombing
group
5. Recon
6. Admin.

Army - Army

Corps - Gen. McNaughton

Division - 4 Regt. -

Brigade - Brigades - Infantry -

Battalion - Lt. Col.

Company - Major

Platoon - Lieut.

Section - Cpl or 6 Gps

have 100

Cpl - 2

Regt. - 1 p.p.

Capt. 1

Major - 1

Lt. Col. - 1 + 1 star

Col - 1 + 2 (Mounted as

Lt. - 1 + 3

Regt. - 100 - 100 + 100 + 100

Lt. - 100 - 100 + 100 + 100

Field Marshal - 100 - 100 + 100 + 100

Protection of Person & Property.

Gas mask perfect protection against all
these tear gases. Irritation, pain behind
eyelids, tears. Give fresh air, little
olive oil. & bath. Little olive oil in eye -
slightly warm.

Curbin Duty Gas Mask - Easy to breathe
this gas prop. Head harness for holding
on only. Should be comfortable.

Harness in 2 thumbs separate 2 bands
big chin well in. Pull away back &
release harness. Make sure straps
R loose. Try eyes can see if
wearing correct size. Imp. Too small,

Adjust strap just so comfortable &
wearer.

To remove - place 2 fingers under
mask under chin and pull off. Don't
use metal part to pull it off.

Adjust by top 2 & then side 2 &
lastly bottom 2. Last 2 to adjust to chin.
X-section at centre of 3 compartments.

Inside container - 1. filled w
activated charcoal & beneath pad of
wool (usually marina) wool has no
effect in decontaminating gas. Then for
haze & tear gas. Wool draws particles
of gas out it & doesn't allow it pass thru.
Charcoal for lung & various gases.

Last 72 hrs. (long) Only in use
when in concentration. Protect container
from moisture.

2. Inside rubber vent. Flatten down
on container as breath out. See if vent

clear from moisture. Air in the container
only out this end. Mask not rolled
up so mica glass will crack -
if fractured not gas proof. In
wet places rubber may rot.

1. Container - see if damaged.

3. Small valve inside (located in container)
lay perfectly flat & not injured
in any way.

4. Examine for stress of air piece &
container.

5. Take between finger & thumb & stretch
to see if porous. Look thro' 2 light.
Also outer valve.

Moisture inside must be dried -
by cotton wool or hang in dry place.

Soak .03% & gently dip mask along
face piece. Formalin .02%. Put away
perfectly straight.

Service Mask -

Container similar. Tube corrugated
rubber. In bottom of C. 4 slots 2 on each
side. Allow air to enter.

Face piece - strong rubber & defroster on
each eye piece - air valve. In break
the tube

Comfortable pad for back of head.

To First Aid

A. R. P.

Wick & Ratten

Wick - used to fill up where mustard & lewisite fell as well. In bombs row & good spray. Not much known about it. It is persistent, colourless & oily liquid. Some effect on nasal passages - not direct like cause to vapour. Respirator complete protection again.

Ratten - Non persistent as vapour. Addor down in low concentration of gas. Powder persistent - grayish green or white. Can be made black by blowing. Used to contaminate coal or sand. Effect in moisture gives fumes having funny effect in individuals - in time inability to navigate. Thus paralyze. Not able to support wt. of B. Had to course, won't talk, went asleep - Not soldiers. As progress of poisoning funny yellow down. Blood cells attacked & anemia follows in & requires strong & strenuous treatment & over time they don't recover further results. Face turns to copper. Marrow & liver affected. Skin "inky red" - After 3 days if keeps up urine ceases & death as result of convulsion. Chemical detector Type A. used

Every one 100% protected against by Gas Mask.

to detect. True orange tint & white paper

Chlorine gases
in presence of liquids vegetables will
turn brown or red. H. S. H. & B. B. C.
also give same effect but tear producing
qualities give them away.

Domestic Gases. Bombing, explosion
or sabotage
Hydro and used in any city & destroying
vehicles in homes 1 or 2 sniffs for odour.
Pleasant smell - better apples.

Hydrogen H_2 S.
Very dangerous. Direct paralysis effect
on breathing centre of brain. Result of
explosion of domestic refrigeration plants
storage vaults for guns.

Ammonia - part of refrigerant.

Carbon Monoxide. No odour, in cities, slow
effect to a point when terminal effect rapid.

Nitro Oxide Gases - Demolition - explosion for
breaking down buildings.

The mask isn't worth anything against
these gases. Stay in presence of fresh air
where gases likely to be. Not too important
is anyone yelling if only got on "pig snout"
mask. Wait for service mask.

more by rubbing. Unable to introduce
injection by imitation. Immediate in
effect, very effective in areas concentration.
Usually possible in short time & area,
Areas of pure area & possible to guide
person straight to these place & relieve
keep for 5 mins. - Long time & persistent, think
he is lost. Don't take to First Aid Post.

If have group - line up & join by chain
feeling of company & follow alone. Don't
let go of chain - get lost.

^{solid} Chores - ~~Ch~~ C. A. P. white crystal
in body. Heavy fume, may be smoke
occurs in head. Work well if in warm
ground. Usually in bomb & burst. Known
to non-persistent. Mask by police by
gritting nose. Used as test for masks.

Ethyl-iodo-ste - K. S. K. -

1. persistent - liquid
2. pure form colorless - in war heavy oily
dark brown liquid.
3. Pure odor of its own - called fear-drops
Nail polish remover smell.
4. severe stinging - lasts long.
5. Give off fumes & long time as oily residue

B. B. C.

1. Dark brown oily - persistent.
2. Not so irritating as ↑ but last 4 hrs.

3. A. P. cheap now likely 2 1/2 cents.

K. S. K. very severe - lasts.

B. B. C. severe

Nasal - all contain arsenic. Visible appearance of smoke. Not so imp. because masks improved 100%. In masks now filter keeping out dustlike particles. Not soluble in water - can be driven off. The odours are value & spotting.

Bi - phenyl - chlor - arsenic - D. A.

" " amino " " - D. M. more

likely to be used. yellow crystal, gives off yellow smoke

Bi - phenyl - sian - arsenic - D. C.

Lung Infection - death dealing effects seriously not from poison but physiological effect on lung tissues. Instead of passing this stuff & irritate secreting mucus which makes person drown by own - edema of lungs - no one able to get in cause mucus in air cells.

1. Chlorine 2. Phosgene 3. Diphosgene.

4. Chlor - Picric

1. Time chosen - 1915 by German 1st very irritating - choking & coughing spasmodically better than Cl₂ again. It has of chloride of lime. Like whooping cough. Non-persistent.

2. Most toxic 10x more than No. 1. but in natural setting liquid. 46.8° F boiling point. Leaves no residue but liquid dark brown. Hence colorless vapor at 57° given off but no liquid visible. 1 can gas also. Helps for people to put on mask because noticed by watering eyes. Lung action somewhat delayed. Telling of brain - People stand up. doesn't last long.

Gases.

Lecture III.

What war gases are
Physical Characteristics

Gas used in general sense. Don't need to be gaseous. War gas any substance acting in poisonous way upon body. Not by individual breathing. Form of liquid or vapour physiological effect.

2 classes as environments

1. non-persistent - when liberated converted in vapour, gas or smoke & not always visible except when gassed. No time travel in cloud. Leave no liquid residue or any residue behind them. Travel in wind & depend on velocity. Too long ^{by wind} diluted - not so much effect.

2. Persistent - usually liquid type. Evaporate slowly as oil & sticky. Some off dangerous vapour often visible. Chy. on which fall thick off fumes as long as it evaporates, or else other steps taken to neutralize substances. May be condensed til interfered.

Mustard gas - depended on volume of vapor alone from persistent type. Often remain in shell hole 4 hrs. Gas mostly shot by shells in last war. To-day light thin shelled bomb & dropped. Planes fly low & spray gas. Left out powder. Any plane ops

Effects -

1. Causing large no. of casualties in given area in short time. People afraid of it causing chaos effecting morale of all civl & otherwise.
2. Reduce & arrest industrial life. - Intense pain by poisoning people so production can't proceed.

3. Keep military people in own quarters. So bring about surprise attack.

7. Make food & stores bad for use - wastage which is imp - common error but by enemy reprehensible. Use combination of gases no.

Weather effects gas. Warm weather better for persistent gas. Cold " little effect or none. In humid tendencies to freeze. Thick around to warm surroundings which takes effect. Rain often cleansing atmosphere & streets, but moisture helps evaporate.

Good weather ^{for attack} - low wind, clear night, ground mist.

Effects upon Body.

1. Tear gases - irritate eyes - lacrimates.
2. More irritants - stimulates.
3. Lung " - ask.
4. Blister Gases - vesicles.

Well mix - confuse in defense & treatment of.

1 & 2 possess features common to all listed as instances. Not fatal & not permanent in effect. Selective in irritation in nerve endings of eyes - blinded by tears - overflow, swollen & hot by contact.